

5' ····T▼GATCA····3' 3' ···ACTAG▲T····5'

Concentration

Bcll is a restriction enzyme purified from *Bacillus caldolyticus.*

No Heat

Inact.

 $10-12u/\mu l$ and 40-

60u/µl*

| <u>Catalogue No</u> | 104-1, 3000 U | | |
|---------------------|-----------------|--|--|
| | 104-2, 3x3000 U | | |

| Percent Activity in MINOTECH Buffers | | | | | |
|--------------------------------------|-----|----|-------|-------|-----|
| L | М | Н | SH | А | К |
| 10-25 | 100 | 75 | 50-75 | 10.25 | 100 |
| 10-25 | 100 | 75 | 50-75 | 10-25 | 100 |

General reaction mixture:

| 10U Bcll | 1μl | | | |
|-----------------------------|-------------|--|--|--|
| 10x M or K buffer * | 2µl | | | |
| DNA substrate | <1µg | | | |
| Sterile ultrapure water | Up to 20 µl | | | |
| Incubate for 15 min at 50°C | | | | |

*In the case of M buffer we recommend the addition of BSA to a final concentration of 100 μ g/ml.

Frequency of Cutting

| λ | Ad-2 | Фx174 | pUC18 | M13mp18 | pBR322 |
|---|------|-------|-------|---------|--------|
| 8 | 5 | 0 | 0 | 0 | 0 |

Reagents supplied: 10x M and 10x K buffer

*Add an H to cat.# to order the high concentration

Unit substrate: Lambda DNA (dam⁻).

Unit calculation assay conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.9 @ 25°C), 10 mM MgCl₂, 1 mM dithiothreitol, 100 μ g/ml BSA. Incubate at 50°C.

Absence of contaminants: 100 units of *Bcl*I do no produce any unspecific clevage products after 16 hrs incubation with 1 μ g of λ DNA (dam⁻) at 50°C. After 50-fold overdigestion with *Bcl*I, greater than 95% of the DNA fragments can be ligated and recut with this enzyme.

Storage buffer: 50 mM KCl, 10 mM Tris-HCl (pH. 7.4), 0.1 mM EDTA, 1 mM dithiothreitol, 200 μ g/ml BSA, and 50% glycerol. Store at -20°C.

Heat inactivation: No.

Methylation Sensitivity: dam methylation: Blocked dcm methylation: Not sensitive CpG methylation: Not sensitive





Lambda DNA (dam⁻) 0.7 % agarose